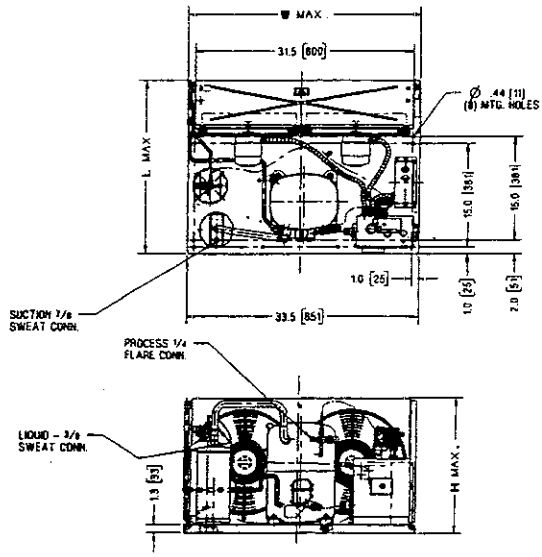
AVA4540EXNXM

TECUMSEH HERMETIC CONDENSING UNITS

April 1, 1997

Revision #1 2000

MODEL AVA4540EXNXM (B/M 2B3127-9) R22 3 HP AIR COOLED



NOTE DIMENSIONS = INCHES (MILLIMETERS)

MO

Model	Dimensions				*Line Connections		Pumpdown 90°F 90% full	AIR (cfm)	Oil Charge (oz.)	Gross Wt. (lbs.)
	L	W	H	CH	Suction	Liquid				
AVA4540EXNXM	25.0	33.6	19.5	N/A	7/8 S	3/8 S	13.8#	1630	55	221

*F=Flare, S=Solder, RF or RS = Rotolock with Flare or Solder Connections
Factory Charge: 20 psig nitrogen - MUST BE EVACUATED

60 Hertz Performance

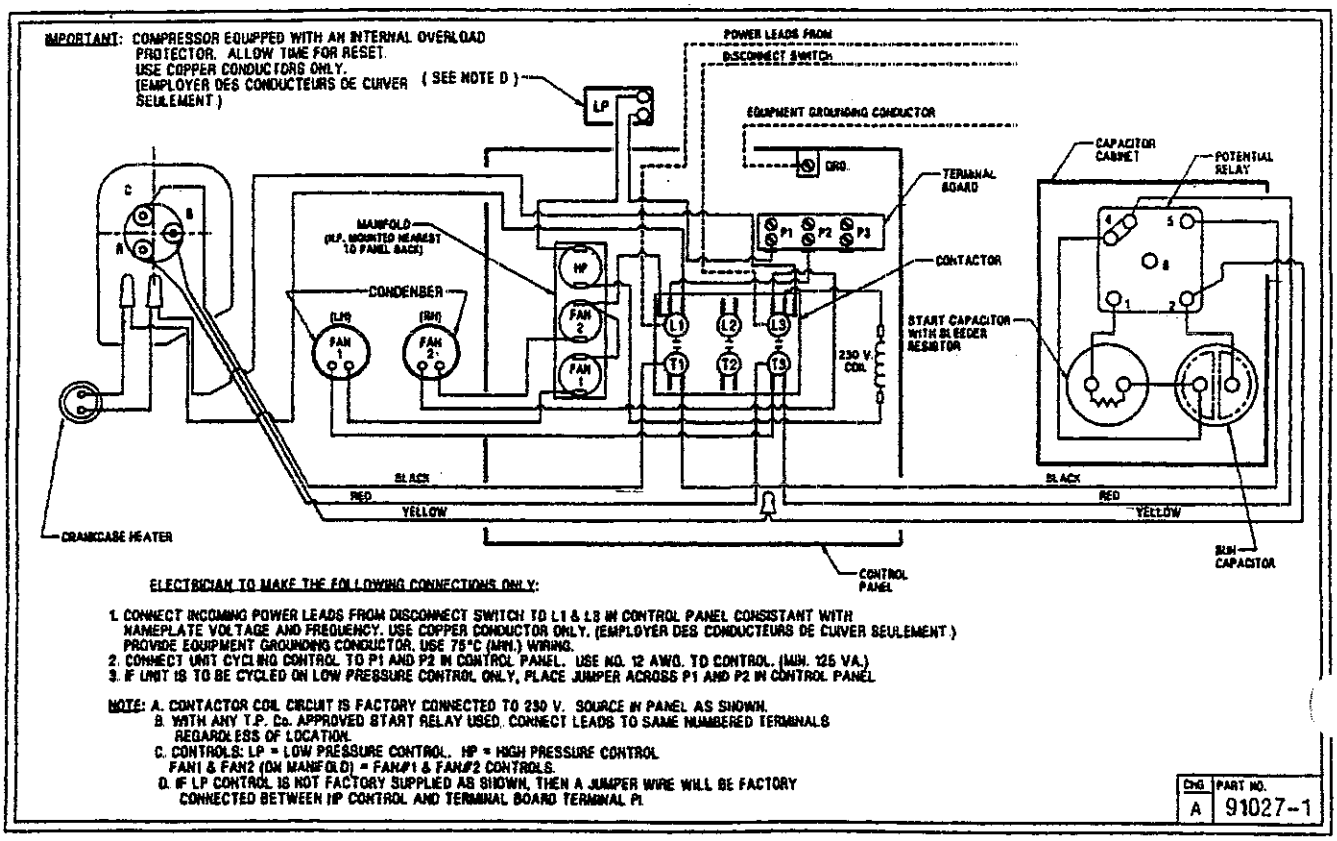
Approved Evap. Range		Ambient											
		80°F			90°F			100°F			110°F		
°F	PSIG	BTUH	Watts	Head	BTUH	Watts	Head	BTUH	Watts	Head	BTUH	Watts	Head
10	32.8	21403	2978	198	19641	3064	225	17328	3095	257	15487	3131	290
15	37.7	24192	3159	207	22233	3257	235	19833	3314	266	17919	3365	300
20	43.0	27028	3441	214	24548	3543	243	22376	3636	274	20218	3724	309
25	48.7	30086	3635	224	27485	3756	253	25079	3860	284	22710	3972	320
30	54.8	33213	3841	234	30479	3981	263	27830	4098	296	25248	4230	331
35	61.4	36408	4059	246	33531	4216	275	30628	4350	307	27830	4496	343
40	68.5	39673	4290	258	36641	4463	287	33473	4616	320	30458	4772	356
45	76.0	43006	4533	271	39809	4721	300	36366	4895	334	33131	5058	369
50	84.0	46408	4788	285	43035	4991	314	39306	5188	348	35849	5352	383
55	92.6	49879	5055	299	46319	5271	328	42294	5495	363	38613	5656	397

Based on 65°F Return Gas, 5°F Subcooling

Date: 4-1-97
Rev 2/2001

SPECIFICATIONS **AVA4540EXNXM**

Nominal Voltage ---------- 230/208-60-1
Unit B/M ---------- 2B3127-9
Voltage Range ---------- 253 to 197
Min. Circuit Ampacity ----- 29.3
Max. Fuse Size (Amps) ----- 50.0
Compressor Model ---------- AVA5542EXN
Bill of Material ------ AV144ET-001
RLA/LRA ---------- 21.2/108.0
Fan RLA ---------- 1.3
ESP Overload ------- Internal
ESP Relay ---------- P82966
Cap. Cab. Assy. ----- AE1397-003
Start Cap. ---------- 85PS330D16 **Run Cap. ---------- 85PR440F28**
Rating ----- 130-156MFD/330V **Rating ------ 40MFD/440V**
Fan Motor ----------TFM502
Pressure Controls ---------- High 84095-1, Low 84026-5
Contactor ---------- 91014 (30 AMP 3-PH/230V COIL)
Fan Controls (2 Req) -------- 84096-1 (Fan #1), 84096-2 (Fan #2)
Control Panel Assy. ----------AC1390-2 **Optional Crank Case Heater--- K31-9**
Fan Blade (2 Req)--- 51568 **Receiver Tank -------- 51081-1**
Condenser Shroud --70648-2 **Rec. Tank RL Valve – 31581-1 (3/8"S)**
Condenser ---------- K42-17 **Process Valve ---------- 31583-1 (1/4")**
Fan Guard (2 Req)—70831 **Teflon Gasket --------- 30334**
Accumulator --------- TK00042000 **Optional Outdoor Enclosure TP-241D**
Unit Drawing ---------- SU1920
Schematic or Elect. Dwg. ---- 91027-1


IMPORTANT: COMPRESSOR EQUIPPED WITH AN INTERNAL OVERLOAD PROTECTOR. ALLOW TIME FOR RESET.
USE COPPER CONDUCTORS ONLY.
(EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT)
(SEE NOTE D)
LP
POWER LEADS FROM DISCONNECT SWITCH
EQUIPMENT GROUNDING CONDUCTOR
GRD.
TERMINAL BOARD
P1 P2 P3
CONTACTOR
CAPACITOR CABINET
POTENTIAL RELAY
MANIFOLD (H.P. MOUNTED NEAREST TO PANEL BACK)
CONDENSER
(LH)
(RH)
FAN 1
FAN 2
HP
L1 L2 L3
T1 T2 T3
230 V. COIL
START CAPACITOR WITH BLEEDER RESISTOR
BLACK
RED
YELLOW
CRANKCASE HEATER
CONTROL PANEL
RUN CAPACITOR
ELECTRICIAN TO MAKE THE FOLLOWING CONNECTIONS ONLY:
1. CONNECT INCOMING POWER LEADS FROM DISCONNECT SWITCH TO L1 & L3 IN CONTROL PANEL CONSISTANT WITH NAMEPLATE VOLTAGE AND FREQUENCY. USE COPPER CONDUCTOR ONLY. (EMPLOYER DES CONDUCTEURS DE CUIVER SEULEMENT) PROVIDE EQUIPMENT GROUNDING CONDUCTOR. USE 75°C (MIN.) WIRING.
2. CONNECT UNIT CYCLING CONTROL TO P1 AND P2 IN CONTROL PANEL. USE NO. 12 AWG. TO CONTROL. (MIN. 125 VA.)
3. IF UNIT IS TO BE CYCLED ON LOW PRESSURE CONTROL ONLY, PLACE JUMPER ACROSS P1 AND P2 IN CONTROL PANEL
NOTE: A. CONTACTOR COIL CIRCUIT IS FACTORY CONNECTED TO 230 V. SOURCE IN PANEL AS SHOWN.
B. WITH ANY T.P. Co. APPROVED START RELAY USED. CONNECT LEADS TO SAME NUMBERED TERMINALS REGARDLESS OF LOCATION.
C. CONTROLS: LP = LOW PRESSURE CONTROL. HP = HIGH PRESSURE CONTROL
FAN1 & FAN2 (ON MANIFOLD) = FAN#1 & FAN#2 CONTROLS.
D. IF LP CONTROL IS NOT FACTORY SUPPLIED AS SHOWN, THEN A JUMPER WIRE WILL BE FACTORY CONNECTED BETWEEN HP CONTROL AND TERMINAL BOARD TERMINAL P1
CHG A
PART NO. 91027-1